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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,319	07/11/2003	Michael Robert Sameuls	AD689SUSNA	4771

23906 7590 04/22/2005

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WILMINGTON, DE 19805

EXAMINER
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SADULA, JENNIFER R

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/618,319

Applicant(s)

SAMUELS ET AL

Examiner

Jennifer R. Sadula

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/03, 12/22/03</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The IDS submitted 11/17/03 and 12/22/03 have been considered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-16, 25, 28 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 10-16, 25 and 31- these claims are drawn toward a container comprising a LCP material. It is unclear if the container is made from the LCP or if the container contains an LCP. Appropriate correction is required.

With regard to claim 28, it is unclear from which this claim depends. Examiner notes that this claim has been searched as being dependent from claim 1. However, appropriate correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/726,227. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the copending application's claims is encompassed by the present invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-16 of copending Application No. 10/726,119. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the copending application's claims is encompassed by the present invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 5,110,896. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the present invention encompasses the patented claims.

Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 5,250,654. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the present invention encompasses the patented claims.

Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 5,397,502. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the present invention encompasses the patented claims.

Claims 1-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 5,525,700. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claimed composition of the present invention encompasses the patented claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8, 10-19, 22 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Sugimori, U.S. Patent No. 4,814,417.

Applicants claim a liquid crystalline polyester (LCP) material comprising the components as specified in claim 1 in the ratios as specified. Claim 5 is drawn toward a method of making such a block copolymer.

Sugimori teaches a process for producing a LCP polymer of cyclohexanedicarboxylic acid and an aromatic diol wherein the raw materials can be converted into polyesters capable of use in fibers, films and the like (abstract). General formula A of Sugimori anticipates compounds of Applicants' formula I. General formula B of Sugimori anticipates compounds of Applicants' formulas II and V wherein Sugimori further teaches that admixtures of this formula are anticipated (3:45). General formula C of Sugimori anticipates compounds of Applicants' formulas IIIA and IIIB wherein Sugimori further teaches that admixtures of this formula are anticipated (3:62-63). More specifically, R3 can be p-hydroxybenzoic acid and 2-hydroxy-6-napthoic acid (3:55-61). In column 4 Sugimori teaches that the copolymer produced has mol% ratios of A:C = B:C = 100 to 5:0 to 95. When A:C is 5:95 the structural units A:B:C in the polymer become 4.77:4.77:90.46 (mol%). This satisfies the ratios as specified in claims 1 and 3. With regard to claims 5 the examples depict the independent additions of each unit and

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specifically, column 5, lines 29-47 teaches the direct interaction of the monomeric units. With regard to the final product produced (such as is claimed by claims 10-19), Sugimori teaches that the materials are for fibers, films, etc (abstract) but more particularly anywhere with a demand for heat resistance, rigidity, or chemical resistance such as is the case with molded articles (1:15-20).

Claims 1-3, 5, 8, 10-19, 26 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Samuels et al., U.S. Patent No. 5,466,773 ("Samuels I").

Samuels I teaches compounds as shown in column 1 wherein the compounds shown are versions where  $R^2$  and  $R^4$  are substituted. The molar ratios are taught (1:57-64), the uses are disclosed (2:14-19), and  $R^1$  is depicted as p-phenylene (thereby anticipating Applicants' claim 2).

Claims 1-3, 5, 8, and 10-31 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Samuels et al., U.S. Patent No. 5,525,700 ("Samuels II").

Samuels II teaches compounds as shown in column 1 wherein the compounds shown wherein the molar ratios are taught (2:29-55, 3:6-19), the uses are disclosed (5:10-43), and  $R^1$  is depicted as p-phenylene (thereby anticipating Applicants' claim 2). This Samuels reference further teaches the process of coating different articles such as paper (see examples ) The melt viscosity of examples 21-23 is in accordance with Applicants' claim 4.

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Claims 1-3, 5, 8, 10-19, 26 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Samuels et al., U.S. Patent No. 6,022,491 ("Samuels III").

Samuels III teaches compounds as shown in column 1/2 wherein the compounds shown are exactly the same as those currently claimed. The molar ratios are taught (2:16-25), the uses are disclosed (1:27-33), and R<sup>1</sup> is depicted as p-phenylene (thereby anticipating Applicants' claim 2).

Claims 1-3, 5, 8, 10-19, 26 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Waggoner et al., U.S. Patent No. 5,110,896 ("Waggoner I").

Waggoner I teaches compounds as shown in column 3/4 wherein the compounds shown are exactly the same as those currently claimed. The molar ratios are taught (4:7-19), the uses are disclosed (1:47-2:2), and R<sup>1</sup> is depicted as p-phenylene (thereby anticipating Applicants' claim 2). Additional components may be added to alter the properties (such as melt viscosity) of the final composition (7:2-14).

Claims 1-3, 5, 8, 10-19, 26 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Waggoner et al., U.S. Patent No. 5,397,502 ("Waggoner II").

Waggoner II teaches compounds as shown in column 1 wherein the compounds shown are exactly the same as those currently claimed. The molar ratios are taught (1:67-2:6; 2:31-53), the uses are disclosed (1:7-25), and R<sup>1</sup> is depicted as p-phenylene (thereby anticipating Applicants' claim 2).



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Claims 1-3, 5, 8, 10-19, 26 and 28 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Alms et al., U.S. Patent No. 5,250,654 ("Alms").

Alms teaches compounds as shown in column 2 wherein the compounds shown are exactly the same as those currently claimed. The molar ratios are taught (2:41-50, 4:59-5:7), the uses are disclosed (1:46-68), and R<sup>1</sup> is depicted as p-phenylene (thereby anticipating Applicants' claim 2). Alms further teaches that the melting points are altered (abstract).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 6-7, 9 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of the Samuel references as recited above.

Each Samuel reference teaches the claimed compounds however the references are not specific as to the properties (such as reduction in melt viscosity). However, it would have been obvious to one of ordinary skill in the art at the time of invention to alter the melt viscosity in accordance with the ratios of the blocks (as noted in each these references rejections above) and achieve reasonable success as a polyester composition. The melt viscosity, for example, would be altered dependent upon the intended use of the raw product.

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***Conclusion***

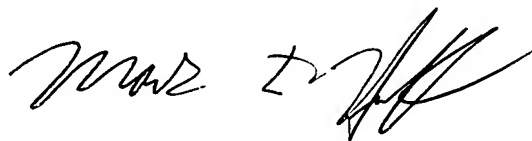
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Waggoner et al., U.S. Patent No 5,710,237 teaches another composition substantially as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer R. Sadula whose telephone number is 571.272.1391. The examiner can normally be reached on Monday through Friday, 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571.272.1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRS  
4/17/05



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